

T-11: Low Carbon Fuel Standard Summary and Recommendation

Background:

In its 2007 report, the CAT recommended that Washington implement a Low Carbon fuel Standard (LCFS) that would yield 10% less carbon intensive motor fuel by 2020. The LCFS would be based on standards under development in California, B.C., and elsewhere.

The CAT recommended LCFS would reduce carbon dioxide equivalent emissions by 10% from the full life cycle emissions of the fuel. That means accounting for emissions from extracting, growing, producing, refining, transporting, storing, and using the fuel over its entire life. It means accounting for a high level of detail in the production process. Ethanol distilled with heat from coal would score worse than ethanol distilled with heat from natural gas or corn stover. In the California approach, life cycle emissions would also include the direct and indirect effects of land conversions; e.g. clearing virgin rainforest to grow palm oil.

The 2007 CAT estimates show that a Washington LCFS could reduce 2020 annual GHG emissions by 3.6 million metric tons. The California approach would phase in the LCFS slowly, approximately 1% per year from 2011 to 2020. California's LCFS is still under development, but they expect to have it in place sometime in 2009.

In the near term, low carbon gasoline would likely have 10% ethanol. Ethanol causes higher levels of evaporative emissions of volatile organic carbons. These are a precursor to ozone. The Puget Sound area violated the EPA ozone standards in summer of 2008. It may be necessary to ensure that a LCFS does not worsen this ozone situation.

Section 211(c)(4) of the federal Clean Air Act generally prevents states from setting fuel standards that are more stringent than federal regulations. Since there is no federal LCFS, however, Ecology believes it has authority to implement a LCFS program by rule.

Benefits of a low carbon fuel standard:

- A LCFS maximizes the possibility for low-cost solutions. It sets a performance standard and lets fuel providers figure out how to most effectively meet them.
- A LCFS does not favor or promote specific technologies and it automatically handles changing technology well. If a new process can provide lower carbon fuel, there are no rigid barriers to prevent immediate introduction and level competition with existing fuels and processes.
- A LCFS keeps government out of having to forecast technological or economic winners, so there's less risk of mistakenly distorting markets and scientific research.
- A LCFS can address the life-cycle emissions to ensure true GHG benefits. It does not have to rely on only the carbon content of the finished product.
- A LCFS yields rapid benefits, it reduces emissions as soon as the fuel is sold and used.
- A LCFS can allow alternate ways to comply to handle uncertainty. California allows four ways:
 - Provide only fuels that meet the standard.
 - Provide a mix of higher and lower carbon fuels that, on average, meet the standard.
 - Acquire sufficient credits from other parties to meet the standard.
 - Use earned and banked credits sufficient to meet the standard.

Recommendation:

The CAT should recommend that Department of Ecology and other agencies secure needed resources to implement a LCFS program by rule. The CAT agrees that sufficient resources to do this job well are critical. The CAT recommends that Ecology and other affected agencies seek resources for a LCFS rule

from the 2010 legislature if possible. If those resources are provided, Ecology should undertake a two step rule-making. Step 1 should be a scoping process, coordinated with other agencies and affected parties, to assess whether the CA LCFS is appropriate or whether major modifications, or other approaches, would be more beneficial. If some version of an LCFS remains the best choice for WA, Ecology should develop a rule to implement a LCFS tailored to Washington needs as appropriate.